
Greenland Enterprises

Post-Accident Inspection

VAMC Gainesville, FL

Overview

Introduction

This inspection took place on 1/11/2019, between 12:00pm and 3:45 pm. The inspection was triggered by an excavation collapse that buried a subcontractor. This inspection was conducted with (b) (6) (OELRICH Construction), (b) (6) (OELRICH Construction) and (b) (6) (Greenland Enterprises). A description of the accident, the findings from the investigation, pictures of the scene, and witness statements are documented below and were reviewed with (b) (6)

Site Information

The project is located at 1601 S.W. Archer Road, Gainesville, FL 32608.

Workers on Site during the Inspection

OELRICH Construction 2 employees, Total Earth Services 1 employees, and Greenland Enterprises 1 employee.

Contractor Roles

This project is a joint venture between Greenland and Saw. This joint venture is the General Contractor. OELRICH is a first tier subcontractor and TES is a second tier contractor hired by OELRICH.

Scope

The inspection was focused on the excavation that collapsed trapping an employee for Total Earth Services. The focus was to investigate the accident to determine if protocols were followed and what caused the excavation collapsed.

Submitted by

(b) (6)

Overview (Continued)

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Pictures of the Scene - Excavation:

Location

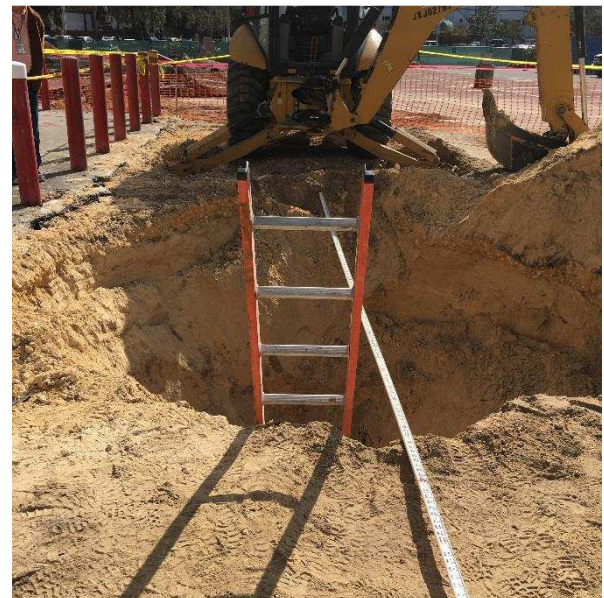
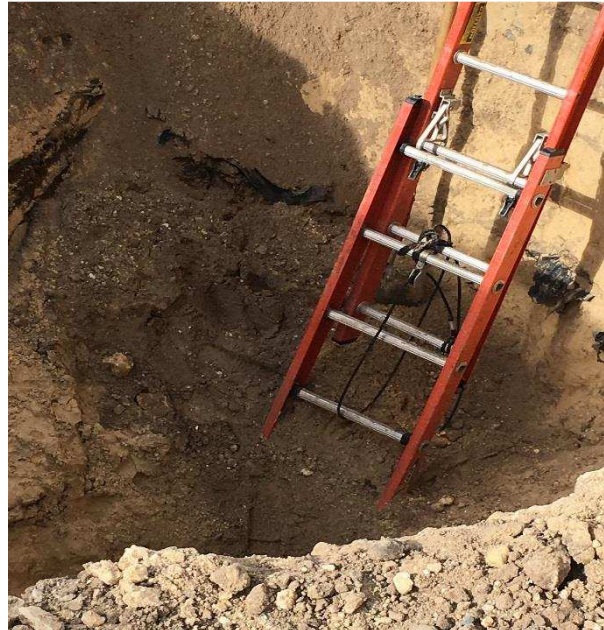
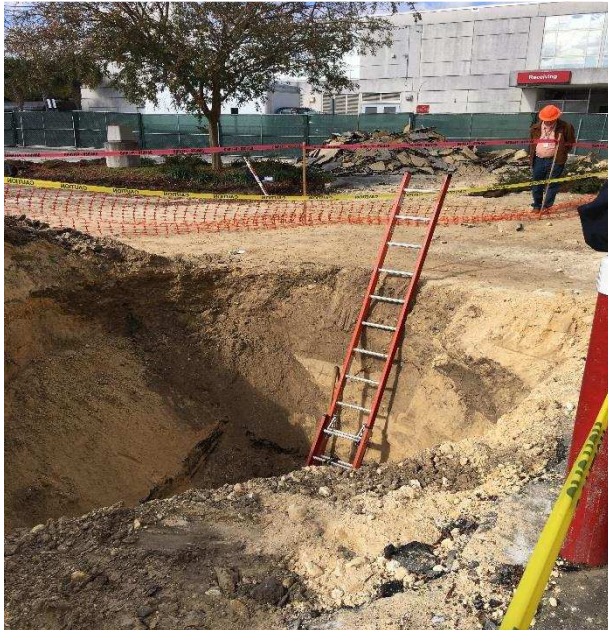
North East Corner of Building 25

Description

Excavation

Responsible Party

Total Earth Services





Pictures of the Scene - Site:

Location

Project Site

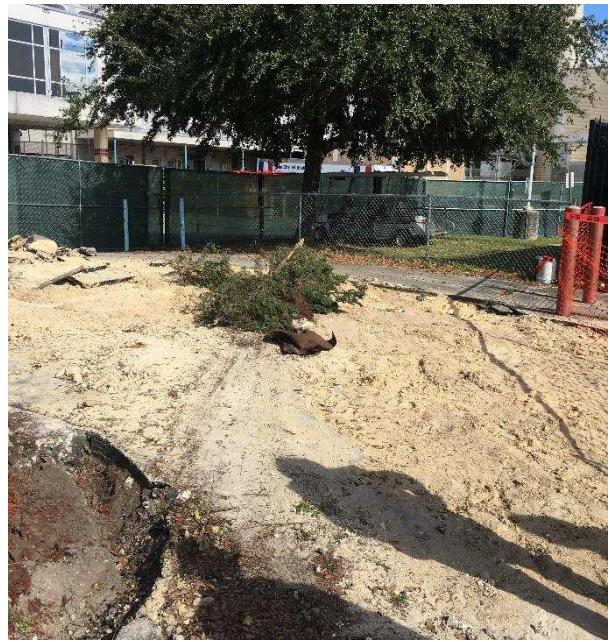
Description

Areas around project site

Responsible Party

SAW-Greenland JV II, Inc.





Accident Description:

The day started about 7:30 am with Total Earth Services (TES) to demo existing asphalt, curbing, and concrete around the job site. TES started this process with three employees (b) (6) (Supervisor) (b) (6) (Equipment Operator), and (b) (6) (Laborer). The work that was scheduled for the day was to demo pavement, curbing, and sidewalks. No excavation work was scheduled. (b) (6) Greenland Enterprises Site Superintendent and (b) (6) OELRICH Construction Site Superintendent were present at the location but were engaged in other activities during the TES demolition process. (b) (6) left the immediate area to walk electricians into the main campus to lock out electrical circuits. (b) (6) was attending a construction meeting. While (b) (6) and (b) (6) were performing these tasks, a representative from TES called (b) (6) the Supervisor on site for TES and asked (b) (6) to dig a hole to find groundwater and determine the type of soil on site. (b) (6) began digging a hole with the backhoe.

Once the hole was approximately 16' deep, the three employees from TES put an extension ladder into the excavation. (b) (6) then asked (b) (6) to get on the ladder in the excavation to hold the grade rod so he could shoot grade. At this point, (b) (6) returned from the main campus to find TES had created this deep excavation. As (b) (6) approached the excavation, (b) (6) returned from his meeting to check the status of work on site as well. Both (b) (6) and (b) (6) asked TES what they were doing and why an employee was in an excavation with no protective system. At this point (b) (6) asked (b) (6) to exit the excavation and started to walk to the job trailer, to get the safety manual to show TES that they were not in compliance with OSHA Trenching and Excavations standards and site safety requirements.

The TES employee did not exit the trench as instructed. (b) (6) was on the ladder five rungs down from the top of the excavation. Before exiting (b) (6) took the shot on grade and (b) (6) passed out the grade rod to (b) (6) standing at the top of the ladder. While doing this (b) (6) knocked his hardhat off, and it fell to the bottom of the trench. (b) (6) told (b) (6) to leave the hardhat in the hole and instructed him not to go down to the bottom of the excavation to get the hardhat.

(b) (6) turned around to set down the grade rod, and (b) (6) proceeded to climb down into the excavation to get his hard hat. Once he was in the bottom of the excavation, the side of the excavation nearest the spoil pile collapsed on top of him. At this point, (b) (6) was completely buried under the dirt. (b) (6) immediately called Fire and EMS services. Fire and EMS arrived approximately five minutes later and started to hand dig out (b) (6). Within 15 minutes, Fire and EMS removed (b) (6) from the excavation.

(b) (6) was breathing and talking and was taken to the hospital for evaluation and observation. Once (b) (6) was removed from the trench, the trench was barricaded to prevent any unauthorized access to the trench. The project site was closed until an accident investigation could be conducted. Once the investigation had taken place, the excavation was backfilled.

Findings:

- SAW-Greenland JV II Inc. site-specific safety plan was not available for review onsite
- Greenland and OELRICH Superintendents should have ensured that the worker immediately exited from excavation once work was deemed unsafe.
- TES did not follow the site-specific APP provided by SAW-Greenland JV II Inc.
- Specifically Section 11 U Excavation and Trenching
- TES Competent Person did not inspect and/or eliminate hazards associated with the excavation before worker entered the excavation
- TES Supervisor (b) (6) lacks adequate training to function as the competent person for excavation operations. An OSHA 30 course is not adequate.
- TES did not exit the excavation as instructed when Greenland and OELRICH Superintendent deemed work unsafe
- TES provided no protective system for employees working in an excavation deeper than 5 feet.
- Spoil pile not set back 2' from the edge of the excavation
- Conflicting groundwater reports lead to the excavation being dug to determine the depth of the groundwater. TES failed to notify the controlling contractor or their Tier 1 subcontractor of the change in the work schedule for the day.
- TES employees safety training inadequate
- Toolbox talks were up to date
- OSHA 10hr and 30hr certificates were up to date for TES employees. It should be noted that the equipment operator and laborer for TES completed the OSHA 10hr training 3-5 days to the accident. TES supervisor completed his OSHA 30hr training in 2012
- Protocol for reporting major accidents was followed

Conclusions:

Based on the witness statements (see attached scans) and the findings from the scene, multiple issues contributed to this accident.

- APP should have been reviewed with the subcontractor's onsite before starting work and that review documented.
- TES made a substantial change in the scope of work for the day without notifying the General Contractor.
- TES should have requested another Geo-Tech report instead of digging an exploratory excavation.
- The TES Supervisor put the worker in an unsafe position and is not competent to manage trenching and excavation operations.
- Workers could have used a different technique to shoot grade without entering excavation. Workers could have supported the grade rod from both sides of the excavation to get the grade if necessary.

- If an entry was made, a protective system was required (sloping, shielding, or shoring).
- Spoil pile was not located 2' away from the edge of the excavation. This additional weight of the spoil pile probably contributed to the collapse along with the type of soil present.

Recommendations:

- Review accident and findings with SAW, Greenland, and OELRICH Construction personnel to create awareness and possible reoccurrence.
- Treat all excavations and trenches as if they are Class C type soil, which requires the use of protective systems. Recommend making this a company policy for all project sites.
- Review and document the APP plan with all subcontractors on site
- Conduct monthly safety audits and/or have an SSHO on site
- The general contractor should conduct frequent and regular inspections of the site and document these inspections.